

WHAT IS CLAIMED IS:

1. A semiconductor integrated device comprising:
  - a first semiconductor device having a plurality of terminals; and
- 5 a second semiconductor device having a plurality of terminals, wherein a few or all of the terminals of said first semiconductor device being connected with the corresponding terminals of said second semiconductor device; and
- 10 a substrate which holds said first and second semiconductor devices,  
wherein the terminals of said first semiconductor device that are connected to the corresponding terminals of said second semiconductor device, or the terminals of  
15 said second semiconductor device that are connected to the corresponding terminals of said second semiconductor device, or the terminals of said first and second semiconductor devices that are connected to each other are placed together.
- 20 2. The semiconductor integrated device according to claim 1, wherein terminals of said first and second semiconductor device that are connected to each other are arranged opposite to each other on said substrate.

3. The semiconductor integrated device according to claim 1, wherein the terminals of said first semiconductor device that are connected to the corresponding terminals of said second semiconductor device, or the terminals of said second 5 semiconductor device that are connected to the corresponding terminals of said second semiconductor device, or the terminals of said first and second semiconductor devices that are connected to each other are arranged on one side of an edge part where the plurality of connecting terminals 10 of said first semiconductor device or second semiconductor device are arranged.

4. The semiconductor integrated device according to claim 1, wherein the terminals of said first semiconductor device that are connected to the corresponding terminals of said second semiconductor device, or the terminals of said second 15 semiconductor device that are connected to the corresponding terminals of said second semiconductor device, or the terminals of said first and second semiconductor devices that are connected to each other are arranged in series on one side of an edge section where the plurality of connecting terminals 20 of said first semiconductor device or second semiconductor device are arranged and on a side adjacent to the one side.

5. The semiconductor integrated device according to claim  
1, wherein the connecting terminals constituting said  
prescribed connecting terminal group are arranged in series  
such that these connecting terminals are related by the  
5 prescribed order to each other.

6. The semiconductor integrated device according to claim  
1, wherein the respective pluralities of connecting  
terminals of said first semiconductor device and second  
10 semiconductor device are arranged on the long side part in  
the longitudinal direction, the respective short side parts  
of said first semiconductor device and second semiconductor  
device are arranged opposite to each other and said  
respective prescribed connecting terminals are arranged in  
15 series such that these groups are related with each other  
by the prescribed order from the short side part in the long  
side part close to said short side part.

7. The semiconductor integrated device according to claim  
20 1, wherein said first semiconductor device comprises:  
a power source input terminal which receives the supply  
of power source voltage from said second semiconductor  
device;  
an oscillating unit connected to said power source  
25 input terminal;

a multiplying unit which changes the frequency of a signal which said oscillating unit oscillates; and

an output terminal which outputs the signal whose frequency is changed by said multiplying unit; and said  
5 second semiconductor device comprises:

a power source output terminal which supplies power source voltage to said first semiconductor device; and

a signal input terminal which receives the signal from said output terminal.

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8. A semiconductor integrated device according to claim 7, wherein said first semiconductor device further comprises:

a power source voltage supplying unit which supplies  
15 power source to said oscillating unit;

a power source switching unit which supplies the power source supplied from the power source voltage supplying unit to said oscillating unit and said multiplying unit when said power source voltage supplying unit supplies power source  
20 and which supplies the power source supplied from said power source input terminal to said oscillating unit and said multiplying unit when said power source voltage supplying unit does not supply power source.

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9. A semiconductor integrated device comprising:  
a first semiconductor device having a plurality of  
terminals; and  
a second semiconductor device having a plurality of  
5 terminals, wherein a few or all of the terminals of said  
first semiconductor device being connected with the  
corresponding terminals of said second semiconductor  
device; and

10 a substrate, having two sides, and holds said first  
semiconductor device on one side and said second  
semiconductor device on the other side,

wherein the terminals of said first semiconductor  
device that are connected to the corresponding terminals  
of said second semiconductor device, or the terminals of  
15 said second semiconductor device that are connected to the  
corresponding terminals of said second semiconductor device,  
or the terminals of said first and second semiconductor  
devices that are connected to each other are placed opposite  
to each, on the two sides of the substrate, with a through-hole  
20 corresponding to each terminal in between.

10. The semiconductor integrated device according to claim  
9, wherein the terminals of said first semiconductor device  
that are connected to the corresponding terminals of said  
25 second semiconductor device, or the terminals of said second

semiconductor device that are connected to the corresponding terminals of said second semiconductor device, or the terminals of said first and second semiconductor devices that are connected to each other are arranged on one side  
5 of an edge part where the plurality of connecting terminals of said first semiconductor device or second semiconductor device are arranged.

11. The semiconductor integrated device according to claim  
10 9, wherein the terminals of said first semiconductor device that are connected to the corresponding terminals of said second semiconductor device, or the terminals of said second semiconductor device that are connected to the corresponding terminals of said second semiconductor device, or the terminals of said first and second semiconductor devices that are connected to each other are arranged in series on one side of an edge section where the plurality of connecting terminals of said first semiconductor device or second semiconductor device are arranged and on a side adjacent  
15 to the one side.  
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12. The semiconductor integrated device according to claim  
9, wherein the connecting terminals constituting said prescribed connecting terminal group are arranged in series  
25 such that these connecting terminals are related by the

prescribed order to each other.

13. The semiconductor integrated device according to claim  
9, wherein the respective pluralities of connecting  
5 terminals of said first semiconductor device and second  
semiconductor device are arranged on the long side part in  
the longitudinal direction, the respective short side parts  
of said first semiconductor device and second semiconductor  
device are arranged opposite to each other and said  
10 respective prescribed connecting terminals are arranged in  
series such that these groups are related with each other  
by the prescribed order from the short side part in the long  
side part close to said short side part.
- 15 14. The semiconductor integrated device according to claim  
9, wherein said first semiconductor device comprises:  
a power source input terminal which receives the supply  
of power source voltage from said second semiconductor  
device;
- 20 an oscillating unit connected to said power source  
input terminal;
- a multiplying unit which changes the frequency of a  
signal which said oscillating unit oscillates; and
- an output terminal which outputs the signal whose  
25 frequency is changed by said multiplying unit; and said

second semiconductor device comprises:

a power source output terminal which supplies power source voltage to said first semiconductor device; and

5 a signal input terminal which receives the signal from  
said output terminal.

15. A semiconductor integrated device according to claim 14, wherein said first semiconductor device further comprises:

10 a power source voltage supplying unit which supplies power source to said oscillating unit;

a power source switching unit which supplies the power source supplied from the power source voltage supplying unit to said oscillating unit and said multiplying unit when said 15 power source voltage supplying unit supplies power source and which supplies the power source supplied from said power source input terminal to said oscillating unit and said multiplying unit when said power source voltage supplying unit does not supply power source.